

## City of Gainesville

City Hall 200 East University Avenue Gainesville, Florida 32601

## **Legislation Text**

File #: 081036., Version: 0

Evaluation of Biomass-Fueled Generation Facility Proposals (B)

On May 12, 2008 the City Commission authorized the General Manager to negotiate and execute a purchased power agreement (PPA) for the output of a nominally 100 mega-watt (MW) net power plant, fueled with biomass and located on the Deerhaven Power Plant site. Negotiations have been successfully concluded, but because of adjustments to the initial proposal to reflect changing fuel prices, demand for electricity, and power plant construction costs, the General Manager has decided to advise the City Commission of these negotiated changes, their economic implications and to submit the executed PPA to the Commission for final approval. On May 12, 2008 the City Commission authorized the General Manager to negotiate and execute a purchased power agreement (PPA) with Nacogdoches Power LLC for the output of a nominally 100 mega-watt (MW) net power plant, fueled with biomass and located on the Deerhaven Power Plant site. Nacogdoches Power LLC was a subsidiary of Energy Management Inc. and BayCorp holdings. Since that time these two entities have been joined by Tyr Energy, a subsidiary of ITOCHU Corporation and a new company, American Renewables, was formed and the power plant project for GRU was renamed Gainesville Renewable Energy Center, LLC.

Negotiations have been successfully concluded but there are a number of changes in the project in the contract structure from the initial proposal. The fixed contract prices have increased to reflect changes in the cost of power plant construction, but these price increases have been partially offset by extending the term of the contract. The economic stimulus bill has also provided a grant option that will provide an offset to these price increases, provided that the facility goes on line by January 1, 2014. While the long term economics for the facility are favorable compared to conventional alternatives, the biomass plant may increase the fuel adjustment for the first few years of operation, depending on the outcome of climate change legislation, changes in the cost of the fossil fuels that will be avoided by the biomass plant, third-party contractual unit participation and the completion timeframe of the facility. It should be noted that there are benefits beyond those that would appear on a utility bill, such as over 500 estimated new jobs, tangible property tax revenues, cleaner air in the region, avoided costs to replace aging equipment, and enhanced system reliability.

By completing the proposed plant as soon as possible the maximum benefit of the economic stimulus program will be achieved, as well as a favorable position in the regional biomass fuel market. Furthermore, the proposed facility will allow Gainesville's operations to meet the Kyoto Protocol targets for carbon reduction by 2014 and will enable GRU to meet all currently proposed renewable portfolio standards as well.

The City Commission 1) receive a presentation from the General Manager and staff regarding the Power Purchase Agreement (PPA) between the City and Gainesville Renewable Energy Center, LLC for power generated by the nominal 100MW biomass generating plant; 2) approve the executed PPA; and, 3) authorize the General Manager or his designee to execute such documents and take all steps as may be necessary to implement the terms of the PPA, including but not limited to filing of all required applications with jurisdictional governmental bodies and agencies; and, the lease of and easements over portions of the Deerhaven Generating Station site necessary for the construction and operation of the biomass generating plant.

Until the proposed facility commences operation, there will be no fiscal impact to GRU except for the cost to obtain a need certification from the Florida Public Service Commission. Much of the economic benefit of the biomass plant accrues three to five years after completion due to the effect of increasing fuel prices. The projected thirty year net present value for the facility compared to the projected market electricity cost ranges from \$212 million to \$492 million based on various sensitivities, such as project completion date, implementation of a renewable portfolio

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standard and/or carbon constraint legislation.

The greater value of the plant accumulates after the initial portion (five years plus) of the contract period. With approximately one-half contractual third party participation included with the other sensitivities, the monthly fuel adjustment impact on a typical customer (1000 kwh/month) could range from \$4 to \$8 in 2014, but by 2019 this approaches a break even point. After 2019, the projected fuel adjustment benefits to customers are significant as discussed above considering net present value. These fuel adjustment effects do not reflect the non-utility benefits of intangible property tax paid by participating utilities outside of Alachua County, and the long term benefits of avoiding the cost to replace aging generation units.

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